



December 2016

the wyoming game & fish department

# LANDER REGION newsletter

## Under the Water

Blue ribbon fishery outside Lander



*Fishes Technician Clark Johnson with a nice brown trout from the North Fork Popo Agie Access.*

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The North Fork Popo Agie River near Lander is one of the best wild trout fisheries in Wyoming. It is classified as Blue Ribbon, which is defined as a stream that supports over 600 pounds of trout per stream mile. Only 3% of all stream miles within Wyoming are classified as Blue Ribbon, which shows just how many trout reside in the North Fork Popo Agie compared to other Wyoming streams. The best place to access the North Fork Popo Agie is through the Wyoming Game and Fish Department's (WGFD) North 2<sup>nd</sup> Street Public Fishing Access, which is approximately 2.5 miles north of Lander. This Access Area is through private land as are many of the



walk in access areas around the state. This stream reach is also part of the Wind River Reservation boundary and is co-managed by the WGFD and Shoshone and Arapaho tribes (with assistance from the U.S. Fish and Wildlife Service).

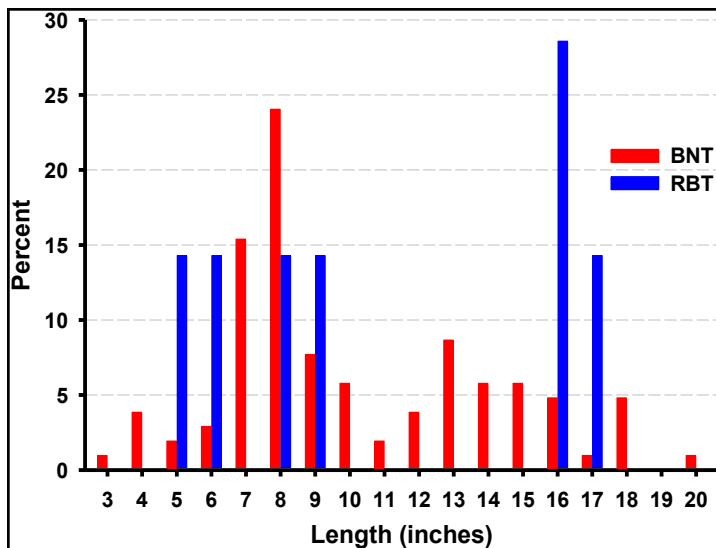


Figure 1. Length frequency of Brown Trout (n = 104 fish) and Rainbow Trout (n = 7 fish) in the North Fork Popo Agie River, North 2<sup>nd</sup> Street Public Fishing Access, October 2016.

The WGFD, U.S. Fish and Wildlife Service, and Shoshone and Arapaho tribes conducted an electrofishing estimate at this Access Area on October 27, 2016. High numbers of Brown Trout were captured, with most in the 7- to 8-inch range (Figure 1). Rainbow trout and Mountain Whitefish were less common, but large fish of both species were observed. The largest Brown Trout was just under 20 inches and weighed over 3.5 pounds, the largest Rainbow Trout was 17 inches and weighed 1.8 pounds, and the largest Mountain Whitefish was just under 19 inches and weighed 2 pounds.

To find out more about this and other access areas visit [wgfd.wyo.gov/Public-Access/Access-Yes](http://wgfd.wyo.gov/Public-Access/Access-Yes)

## On the Ground

### Beaver to help riparian habitat

Regional personnel captured a beaver that was causing damage near Lander. Although a little late in the year, he was released in an area where Habitat Biologist Amy Anderson has been trying to re-establish an active beaver population to improve riparian habitat. Open water, plenty of food and a vacant structure at the release site should help ensure he stays put for the winter.



Beaver at the release site above and at right.



## With the Wildlife

### White-tailed deer gets help at airport

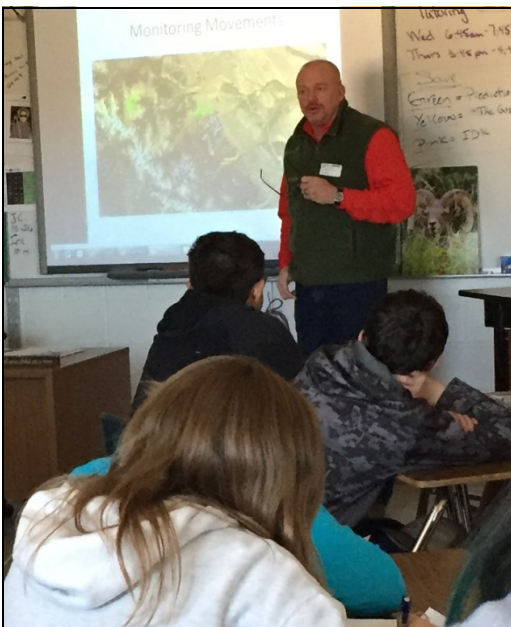
Lander region personnel responded to a deer on the runway call at the Lander airport. This was an all hands on deck effort that ended with the doe white-tailed deer being chemically immobilized by Greg Anderson and later released outside the airport property with the rest of the herd.



*Above: Employees search for deer trapped inside airport fence. At left: deer immobilized and being carried out from between airport buildings to be released outside of the Lander airport.*

## In the Education

### Learning about sheep



*Daryl Lutz presenting bighorn sheep research to high school students*

Daryl Lutz, Lander Region's wildlife management coordinator, spent a day in November at the Lander Valley High School talking to approximately 160 students about the bighorn sheep project in the Temple Peak Herd Unit and on the Wind River Indian Reservation. In late winter 2016, 14 bighorn sheep were captured and collared. The bighorn sheep have shown some pretty remarkable movements from their low elevation winter ranges to their summer ranges near the Continental Divide at the Cirque of the Towers and the South Fork of Bull Lake Creek. The students were outstanding and many were intrigued by the helicopter capture operation and the technology (GPS/satellite linked collars) used to track the sheep. Several of these young people asked very thoughtful and difficult questions. This bighorn sheep work was made possible by the Wyoming Chapter of the Wild Sheep Foundation - much thanks to them!



# Wildlife continued..

## Mule deer classifications across the region

### Dubois and Riverton areas

Despite relatively good spring moisture and decent forage production, deer recruitment east of Riverton was below average. Both Hunt Areas 36 and 90 saw fawn recruitment decreases (Table 1) compared to the previous two years. On a positive note, more deer were observed in area 90 during the classification survey than any time in the previous ten years. The quality of bucks observed during the survey also appeared to be improving following a significant decline in 2011. In Dubois, personnel also observed more deer than seen in close to ten years (Table 1). Fawn recruitment in the Dubois herd was similar to levels observed over the past several years and indications are the population is growing slowly.

Table 1.

Herd Unit	Hunt Area	Year	Does	Fawns	Class I Bucks	Class II Bucks	Class III Bucks	Ylg Bucks	Total Bucks	Total Mule Deer	Fawn/100 Does	Mat Buck/100 Does	Ylg Buck/100 Does	Total Buck/100 Does
SW Bighorn	36	2016	115	60	14	10	2	9	35	210	52	23	8	30
Dubois	128	2016	846	478	78	63	6	61	208	1532	57	17	7	25
Beaver Rim	90	2016	235	87	28	24	9	25	86	408	37	26	11	37

### Lander areas

Wildlife biologists and game wardens recently conducted helicopter surveys for mule deer surveyed in the Lander and surrounding areas. The survey for the South Wind River mule deer herd unit netted the highest sample ever collected at 4,926 mule deer with the main increase coming from hunt areas 94 and 160. In addition, more bucks than ever were found during this year's annual surveys, with 309 yearling bucks and 478 adult bucks. Following two excellent years of fawn recruitment, the buck/doe ratio remained quite good at 34 bucks per 100 does post-hunting season (Figure 2). Harvest seemed lower than expected this year, due to warm and very windy conditions on opening weekend, along with very little snow cover in mid-October. With an increase in this year's post-season buck/doe ratio along with good fawn recruitment this year, mule deer hunting should be very good next year.

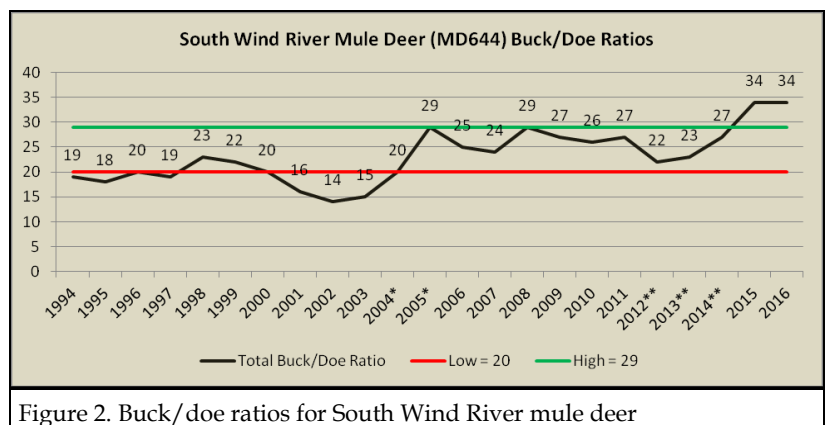


Figure 2. Buck/doe ratios for South Wind River mule deer

Since 2012, WGFD has collected antler class data for bucks in the South Lander wildlife biologist district, with Figure 3 showing an increasing trend in the number of bucks, along with a steady increase in the number of larger bucks, especially in the last two years.

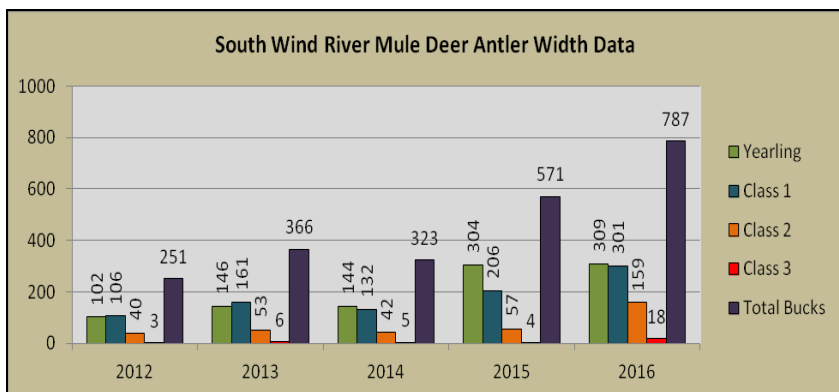


Figure 3. Antler width data. Antler width classes are Class 1 = adult bucks up to 19", Class 2 = 20"-25", and Class 3 = 26" or larger.

Although it is very exciting to see increases in the buck/doe ratios over the last few years, this wouldn't have been possible without better fawn/doe ratios in the preceding years. Figure 4 shows how fawn/doe ratios have fluctuated greatly over the last 22 years. Generally, when fawn/doe ratios exceed 66 fawns/100 does, we tend to see corresponding increases in population size and buck/doe ratios in the following year. There is still much winter left to go this year, and if it remains mild this population should see growth again for another year.

In the Sweetwater mule deer herd unit, ground surveys are still being completed in hunt area 97 in portions that were not flyable. But, even with an incomplete survey, the 2<sup>nd</sup> highest sample ever was collected with nearly 1,600 mule deer observed. Figure 5 shows how fawn/doe ratios have fluctuated greatly over the last 22 years, with a low of 50 fawns per 100 does in 2002 and a high of 95 fawns/100

does in 2014. Recently, fawn/doe ratios have been above average, with 2014 and 2015 having very good fawn survival, with 2016 seeing a decrease, but remaining above 66 fawns/100 does.



Mule deer buck classified in 2016 near Lander.

However, buck/doe ratios continue to struggle in hunt areas 96 and 97. Following two excellent years of fawn recruitment, the buck/doe ratio should have increased, but instead declined this year to 19 bucks per 100 does post-hunting season (Figure 6), which is below the lower end of the recreational management strategy range of 20 to 29 bucks per 100 does for this herd unit. This may be due to light snow cover and surveying post-rut making it more difficult to detect bucks, but may also be attributed to above average hunter density and greater road access allowing hunters to

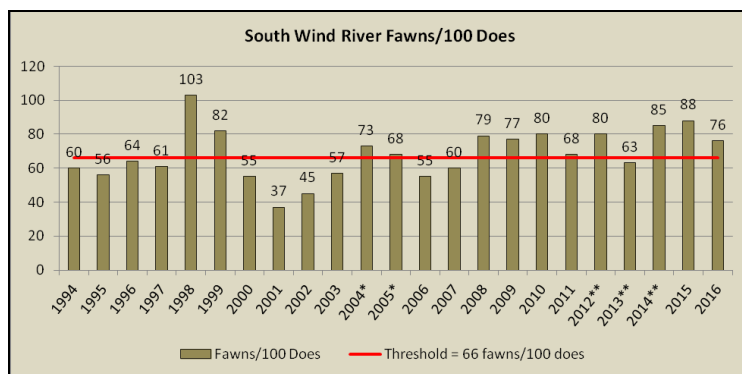


Figure 4. Fawn/doe ratios for South Wind River mule deer. The red line indicates a threshold of 66 fawn/100 does needed for population growth.

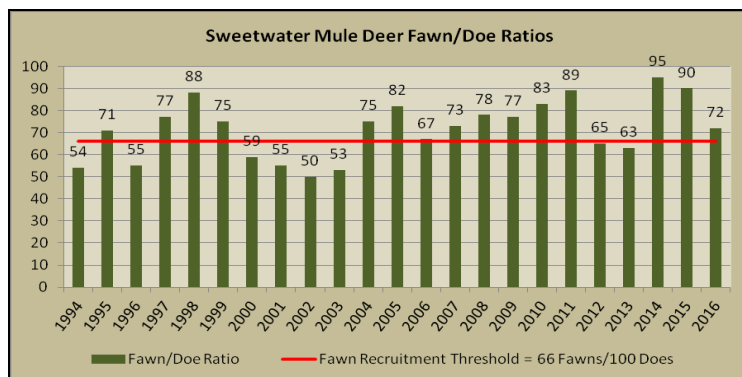


Figure 5. Fawn/doe ratios for the Sweetwater mule deer. The red line indicates a threshold of 66 fawn/100 does needed for population growth.

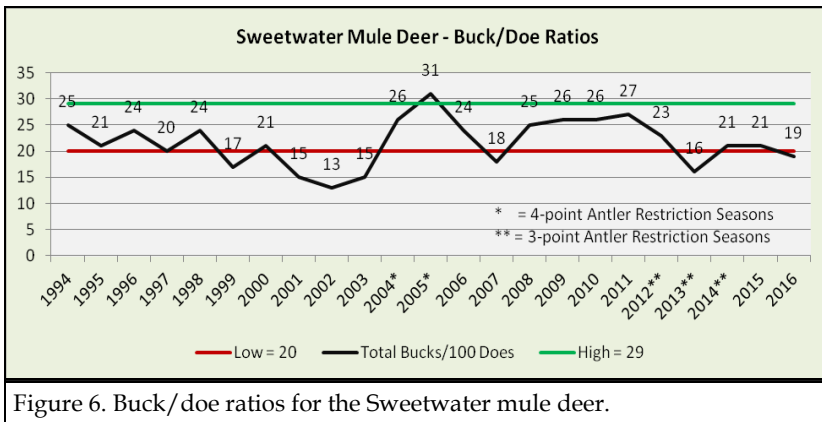


Figure 6. Buck/ doe ratios for the Sweetwater mule deer.

harvest a higher percentage of bucks in this herd unit. Local personnel will be closely scrutinizing harvest data and hunter input regarding the 2016 mule deer season. If the declining trend continues, changes to hunting season structure may be needed to avoid over-harvesting bucks in the herd unit.

For these bucks, antler width data is charted beginning from 2012 in Figure 7. It shows a slowly increasing trend in the number of bucks in the

Sweetwater herd unit, with most of the growth occurring in the number of yearlings and Class 1 bucks, especially in the last two years. Again, the 2016 survey is incomplete, so we expect to see more bucks in the remainder of hunt area 97.



Another mule deer buck classified in 2016 near Lander.

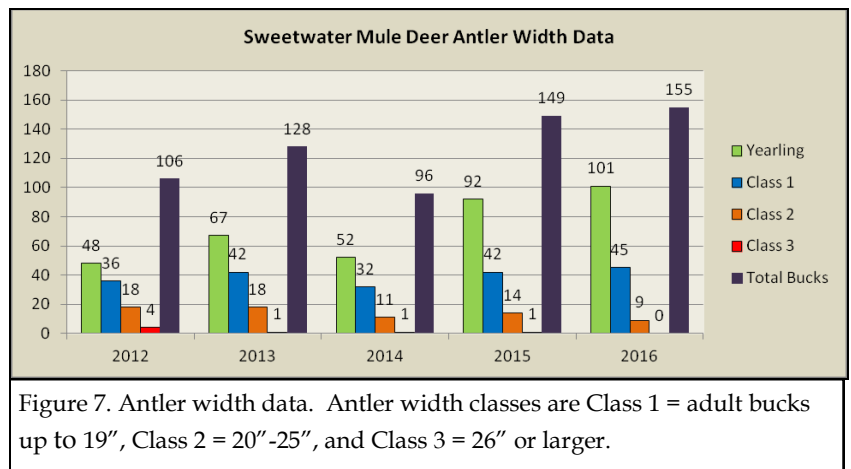


Figure 7. Antler width data. Antler width classes are Class 1 = adult bucks up to 19", Class 2 = 20"-25", and Class 3 = 26" or larger.

Overall, with both herd units having fawn/ doe ratios over the threshold this year, and it being a good forage year and mild winter as of mid-December, this population should be expected to grow for at least another year. All mule deer observed appeared to be quite fat and healthy!

## Behind the Badge

### Deer and lights don't mix

There were several urban/injured wildlife calls that West Rawlins Game Warden Teal Joseph responded to in November. Buck deer in Rawlins began finding ways to ornament their antlers with Christmas decorations. One particular buck deer had Christmas lights wrapped around his antlers and mouth restricting his ability to feed. The deer also had approximately 16 feet of Christmas lights trailing behind him wherever he went. Joseph was able to immobilize this buck deer and free him from the decorations.

Similarly in October, a deer in Lander had to be rescued out of a tangle with a hammock. Deer and other ungulates are



Warden Teal Joseph removing Christmas lights from an immobilized deer in Rawlins.

on the move and in towns more in the fall and they sometimes get caught up in hammocks, volleyball nets, tire swings, tomato cages, and soccer goals too.

Putting these items up for the winter is a great way to keep them away from wildlife, and attaching holiday lights securely to homes and other building structures is safer than draping them over bushes or on the ground. However, if you see an animal tangled in a net or decorations, please call the nearest Game and Fish office or local law enforcement.

## Across the Prairie

### Sage-grouse recruitment

Members of the Wyoming Game and Fish Department's Sage-Grouse Working Group held their annual meeting and Sage-grouse wing-bee in November at the Yellowtail Habitat Management Area near Lovell. Over 2,000 wings were deposited by hunters, which is similar to 2015. However, there were only 0.9 chicks per hen in 2016, down from 1.8 in 2015. Researchers with radio telemetered birds also reported lower reproductive success in 2016 at multiple study sites. Typically, population stability requires 1.4-1.6 chicks/hen. Therefore, measurable declines should be anticipated in sage-grouse lek counts this spring for all areas. It appears cold, wet conditions during nesting reduced nest success and chick survival.



Above: Saratoga Wildlife Biologist Will Schultz, Sinclair Wildlife Biologist Greg Hiatt, and Sage-grouse GIS Analyst Nyssa Whitford examine wings and record the age and sex of harvested Sage-grouse. At right: Members of the Sage-Grouse Working Group at this year's Wing-Bee held at the Yellowtail WHMA Shop.

